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DATE: Tuesday, January 22, 2008

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<input type="checkbox"/>	L9	(glycan\$2 or N-glycan\$2) same L6	23
<input type="checkbox"/>	L8	(glycan\$2 or N-glycan\$2) and L6	55
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<input type="checkbox"/>	L6	oligosaccharide same L4	255
<input type="checkbox"/>	L5	(glycanes or N-glycanes) and L4	2
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<input type="checkbox"/>	L2	(glycanes or N-glycanes) same L1	2
<input type="checkbox"/>	L1	(glycosyltransferase or (oligosacchar\$3 with transferase))	4297

END OF SEARCH HISTORY

=> index bioscience medicine

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 10:39:22 ON 22 JAN 2008

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23 FILE NLDB

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L1 QUE (GLYCOSYLTRANSFERASE OR (OLIGOSACCHAR? (W) TRANSFERASE))

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F6	2798	SCISEARCH
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F31	56	FROSTI
F32	53	DDFU
F33	46	CONFSCI
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F35	26	ANABSTR
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F48	1	IMSRESEARCH
F49	1	RDISCLOSURE
F50	1	USPATOLD
F51	1	IPA
F52	1	NAPRALERT

=> file f1-f2, f5-f13, f17

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=> S L1
L2 27931 L1

=> S (organism or prokaryot? or transform?)(s) L2
10 FILES SEARCHED...
L3 881 (ORGANISM OR PROKARYOT? OR TRANSFORM?)(S) L2

=> S oligosaccharide (s) L3
L4 92 OLIGOSACCHARIDE (S) L3

=> S (glycanes or N-glycanes) and L4
L5 0 (GLYCANES OR N-GLYCANES) AND L4

=> S glycane? and L4
L6 0 GLYCANE? AND L4

=> S glycan? and L4
L7 20 GLYCAN? AND L4

=> dup rem L7
PROCESSING COMPLETED FOR L7
L8 18 DUP REM L7 (2 DUPLICATES REMOVED)

=> d ibib abs L8 1-18

L8 ANSWER 1 OF 18 USPATFULL on STN
ACCESSION NUMBER: 2007:308781 USPATFULL <<LOGINID::20080122>>
TITLE: Methods of Refolding Mammalian Glycosyltransferases
INVENTOR(S): Saribas, Sami, Philadelphia, PA, UNITED STATES
Hakes, David, Willow Grove, PA, UNITED STATES
Willett, Scott, Doylestown, PA, UNITED STATES
Johnson, Karl F., Hatboro, PA, UNITED STATES
Bezila, Daniel James, Quakertown, PA, UNITED STATES
Defrees, Shawn, North Wales, PA, UNITED STATES
PATENT ASSIGNEE(S): Neose Technologies, Inc., Horsham, PA, UNITED STATES,
19044 (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2007269879 A1 20071122
APPLICATION INFO.: US 2005-587769 A1 20050204 (10)
WO 2005-US3856 20050204
20060728 PCT 371 date

NUMBER DATE

PRIORITY INFORMATION: US 2004-542210P 20040204 (60)
US 2004-599406P 20040806 (60)
US 2004-627406P 20041112 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO
CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US

NUMBER OF CLAIMS: 33

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 54 Drawing Page(s)

LINE COUNT: 6293

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods of refolding mammalian glycosyltransferases that have been produced in bacterial cells, and methods to use such refolded glycosyltransferases, including glycosyltransferase mutants that have enhanced ability to be refolded. The invention also provides methods of refolding more than one glycosyltransferase in a single vessel, methods to use such refolded glycosyltransferases, and reaction mixtures comprising the refolded glycosyltransferases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 2 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2006:334025 USPATFULL <<LOGINID::20080122>>

TITLE: Production of sialylated N- ***glycans*** in lower eukaryotes

INVENTOR(S): Hamilton, Stephen R., Enfield, NH, UNITED STATES

PATENT ASSIGNEE(S): GlycoFi, Inc., Lebanon, NH, UNITED STATES (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2006286637 A1 20061221

APPLICATION INFO.: US 2006-429672 A1 20060505 (11)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-371877, filed on 20 Feb 2003, PENDING Continuation-in-part of Ser. No. US 2005-84624, filed on 17 Mar 2005, PENDING Continuation-in-part of Ser. No. US 2005-108088, filed on 15 Apr 2005, PENDING Continuation-in-part of Ser. No. US 2001-892591, filed on 27 Jun 2001, GRANTED, Pat. No. US 7029872 Continuation-in-part of Ser. No. US 2003-371877, filed on 20 Feb 2003, PENDING Continuation-in-part of Ser. No. WO 2002-US41510, filed on 24 Dec 2002, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 2000-214358P 20000628 (60)

US 2000-215638P 20000630 (60)

US 2001-279997P 20010330 (60)

US 2004-554139P 20040317 (60)

US 2004-562424P 20040415 (60)

US 2001-344169P 20011227 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: FISH & NEAVE IP GROUP, ROPES & GRAY LLP, 1251 AVENUE OF
THE AMERICAS FL C3, NEW YORK, NY, 10020-1105, US

NUMBER OF CLAIMS: 34

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 69 Drawing Page(s)

LINE COUNT: 8841

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to eukaryotic host cells which have been modified to produce sialylated glycoproteins by the heterologous expression of a set of glycosyltransferases, including sialyltransferase and/or trans-sialidase, to become host-strains for the production of

mammalian, e.g., human therapeutic glycoproteins. Novel eukaryotic host cells expressing a CMP-sialic acid biosynthetic pathway for the production of sialylated glycoproteins are also provided. The invention provides nucleic acid molecules and combinatorial libraries which can be used to successfully target and express mammalian enzymatic activities (such as those involved in sialylation) to intracellular compartments in a eukaryotic host cell. The process provides an engineered host cell which can be used to express and target any desirable gene(s) involved in glycosylation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 3 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2006:274549 USPATFULL <<LOGINID::20080122>>

TITLE: Expression of soluble, active eukaryotic glycosyltransferases in prokaryotic organisms

INVENTOR(S): Schwartz, Marc F., West Windsor, NJ, UNITED STATES
Soliman, Tarik, Chester Springs, PA, UNITED STATES

PATENT ASSIGNEE(S): Neose Technologies, Inc., Horsham, PA, UNITED STATES
(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2006234345 A1 20061019

APPLICATION INFO.: US 2006-388595 A1 20060324 (11)

NUMBER DATE

PRIORITY INFORMATION: US 2005-665396P 20050324 (60)

US 2005-668899P 20050405 (60)

US 2005-732409P 20051031 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO
CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US

NUMBER OF CLAIMS: 19

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 10 Drawing Page(s)

LINE COUNT: 2793

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides enhanced methods of producing soluble, active eukaryotic glycosyltransferases in prokaryotic microorganisms that have an oxidizing environment.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 4 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2005:196310 USPATFULL <<LOGINID::20080122>>

TITLE: Method to engineer mammalian-type carbohydrate structures

INVENTOR(S): Wildt, Stefan, Lebanon, NH, UNITED STATES
Miele, Robert Gordon, So. Bend, IN, UNITED STATES
Nett, Juergen Hermann, Grantham, NH, UNITED STATES
Davidson, Robert C., Enfield, NH, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2005170452 A1 20050804

APPLICATION INFO.: US 2003-500240 A1 20021224 (10)

WO 2002-US41510 20021224

NUMBER DATE

PRIORITY INFORMATION: US 2001-344169P 20011227 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: FISH & NEAVE IP GROUP, ROPES & GRAY LLP, 1251 AVENUE OF
THE AMERICAS FL C3, NEW YORK, NY, 10020-1105, US

NUMBER OF CLAIMS: 60

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 46 Drawing Page(s)

LINE COUNT: 6002

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to host cells having modified lipid-linked oligosaccharides which may be modified further by heterologous expression of a set of glycosyltransferases, sugar transporters and mannosidases to become host-strains for the production of mammalian, e.g., human therapeutic glycoproteins. The process provides an engineered host cell which can be used to express and target any desirable gene(s) involved in glycosylation. Host cells with modified lipid-linked oligosaccharides are created or selected. N- ***glycans*** made in the engineered host cells have a GlcNAcMan.sub.3GlcNAc.sub.2 core structure which may then be modified further by heterologous expression of one or more enzymes, e.g., glycosyl-transferases, sugar transporters and mannosidases, to yield human-like glycoproteins. For the production of therapeutic proteins, this method may be adapted to engineer cell lines in which any desired glycosylation structure may be obtained.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 5 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2004:82727 USPATFULL <<LOGINID::20080122>>

TITLE: Murine alpha (1,3) fucosyltransferase Fuc-TVII, DNA encoding the same, method for preparing the same, antibodies recognizing the same, immunoassays for detecting the same, plasmids containing such DNA, and cells containing such a plasmid

INVENTOR(S): Natsuka, Shunji, Ann Arbor, MI, UNITED STATES

Gersten, Kevin M., Seattle, WA, UNITED STATES

Lowe, John B., Ann Arbor, MI, UNITED STATES

PATENT ASSIGNEE(S): Regents of the University of Michigan, Ann Arbor, MI, UNITED STATES (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2004063178 A1 20040401

APPLICATION INFO.: US 2003-700505 A1 20031105 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-784077, filed on 16 Feb 2001, PENDING Continuation of Ser. No. US 1996-613098, filed on 8 Mar 1996, ABANDONED

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314

NUMBER OF CLAIMS: 16

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Page(s)

LINE COUNT: 2002

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A gene which encodes a murine leukocyte .alpha.(1,3)fucosyltransferase capable of synthesizing the sialyl Lewis x determinant has been cloned.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 6 OF 18 WPIDS COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2004-635587 [61] WPIDS

CROSS REFERENCE: 2002-154653; 2003-607974; 2004-635586; 2004-642511; 2004-642512; 2004-652965; 2005-649600; 2005-714625; 2006-117604; 2006-145914; 2006-152950; 2006-154044; 2006-154403; 2006-155709; 2006-327511; 2006-470082; 2006-472750; 2007-016216; 2007-173191

DOC. NO. CPI: C2004-228474 [61]

TITLE: Producing modified N- ***glycans*** in non-human eukaryotic host cell comprises introducing into the host cell enzymes for production of a Man5GlcNAc2 carbohydrate structure

DERWENT CLASS: B04; C06; D16; P13

INVENTOR: BOBROWICZ P; CHOI B; CHOI B K; DAVIDSON R C; GERNGROSS T U; HAMILTON S R; NETT J H; WILDT S

PATENT ASSIGNEE: (BOBR-I) BOBROWICZ P; (CHOI-I) CHOI B; (DAVI-I) DAVIDSON
R C; (GERN-I) GERNGROSS T U; (HAMI-I) HAMILTON S R;
(NETT-I) NETT J H; (WILD-I) WILDT S; (CHOI-I) CHOI B W;
(DAVI-I) DAVIDSON R; (GERN-I) GERNGROSS T; (HAMI-I)
HAMILTON S; (NETT-I) NETT J
COUNTRY COUNT: 106

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2004074499	A2	20040902	(200461)*	EN	167	[13]
EP 1599596	A2	20051130	(200578)	EN		
AU 2004213869	A1	20040902	(200610)	EN		
JP 2006518601	W	20060817	(200654)	JA	118	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004074499	A2	WO 2004-US5244	20040220
AU 2004213869	A1	AU 2004-213869	20040220
EP 1599596	A2	EP 2004-713437	20040220
EP 1599596	A2	WO 2004-US5244	20040220
JP 2006518601	W	WO 2004-US5244	20040220
JP 2006518601	W	JP 2006-503788	20040220

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1599596	A2 Based on	WO 2004074499 A
AU 2004213869	A1 Based on	WO 2004074499 A
JP 2006518601	W Based on	WO 2004074499 A

PRIORITY APPLN. INFO: US 2003-371877 20030220

AN 2004-635587 [61] WPIDS

CR 2002-154653; 2003-607974; 2004-635586; 2004-642511; 2004-642512;
2004-652965; 2005-649600; 2005-714625; 2006-117604; 2006-145914;
2006-152950; 2006-154044; 2006-154403; 2006-155709; 2006-327511;
2006-470082; 2006-472750; 2007-016216; 2007-173191

AB WO 2004074499 A2 UPAB: 20060203

NOVELTY - Producing a human-like glycoprotein in a non-human eukaryotic host cell that does not display a 1,6 mannosyltransferase activity with respect to the N- ***glycan*** on a glycoprotein comprises introducing into the host cell one or more enzymes for production of a Man5G1cNAc2 carbohydrate structure, where Man5G1cNAc2 is produced within the host cell at a yield of at least 30 mole percent.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) a nucleic acid library comprising at least two different genetic constructs, where at least one genetic construct comprises a nucleic acid fragment encoding a glycosylation enzyme ligated in-frame with a nucleic acid fragment encoding a cellular targeting signal peptide which it is not normally associated with or a DNA library of fusion constructs comprising:
- (i) at least two nucleotide sequences encoding a cellular targeting signal peptide and at least one nucleotide sequence encoding a catalytic domain region, e.g. mannosidases, glycosyltransferases or glycosidases; or
 - (ii) at least one nucleotide sequence encoding a cellular targeting signal peptide and at least two nucleotide sequences encoding a catalytic domain region, e.g. mannosidases, glycosyltransferases or glycosidases, where at least one nucleotide sequence encoding a catalytic domain region is ligated in-frame to a nucleotide sequence encoding a cellular targeting signal peptide;
- (2) a vector comprising a fusion construct derived from a DNA library of (1) operably linked to an expression control sequence, where the cellular targeting signal peptide is targeted to the endoplasmic reticulum (ER), Golgi or trans-Golgi network;
- (3) a human-like glycoprotein produced by the method above;
- (4) a method for altering the glycosylation pattern of a eukaryotic

cell;

(5) an isolated nucleic acid molecule comprising or consisting of nucleic acid sequences comprising:

(i) at least 45 contiguous nucleotide residues of a sequence of 1363 or 2240 bp (SEQ ID NOS: 41 or 43);

(ii) homologs, variants or derivatives of (i); or

(iii) sequences that hybridize under stringent conditions to (i) but excluding sequences which encode the *S. cerevisiae* OCH1 and MNN1 genes;

(6) an isolated polypeptide comprising the sequence of 454 or 746 amino acids (SEQ ID NOS: 42 or 44);

(7) a eukaryotic host cell comprising at least one vector of (2) or a host cell, produced by the method above, comprising a disruption or mutation of SEQ ID NOS: 41 or 43 which is characterized by having a reduced expression level of SEQ ID NOS: 41 or 43 compared to a host cell without the disruption or mutation; and

(8) a method of modifying plant glycosylation.

USE - The method is useful for producing a human-like glycoprotein in a non-human eukaryotic host cell that does not display a 1,6 mannosyltransferase activity with respect to the N- ***glycan*** on a glycoprotein. The methods, nucleic acid molecule, polypeptide, and DNA library are useful in producing glycoproteins characterized by a high intracellular Man5G1cNAc2 content, i.e. N- ***glycans***.

L8 ANSWER 7 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2003:17884 USPATFULL <<LOGINID::20080122>>

TITLE: Control of immune responses by modulating activity of glycosyltransferases

INVENTOR(S): Marth, Jamey D., San Diego, CA, UNITED STATES

Paulson, James C., Del Mar, CA, UNITED STATES

PATENT ASSIGNEE(S): Cytel Corporation (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2003013636 A1 20030116

APPLICATION INFO.: US 2002-131721 A1 20020423 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1998-87117, filed on 29 May 1998, GRANTED, Pat. No. US 6376475

NUMBER DATE

PRIORITY INFORMATION: US 1997-48303P 19970530 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834

NUMBER OF CLAIMS: 40

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 6 Drawing Page(s)

LINE COUNT: 2059

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods for inhibiting immune responses by inhibiting the biosynthesis of the sialyl galactosides that are involved in immune responses. In particular, B lymphocyte-mediated immune responses are mediated by interfering with synthesis of .alpha.2,6 sialylgalactosides, while T lymphocyte-mediated immune responses are inhibited by blocking synthesis of .alpha.2,3 sialylgalactosides. The inhibition is accomplished by, for example, inhibiting the activity of a glycosyltransferase involved in synthesis of the respective sialyl galactoside.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 8 OF 18 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED.
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ACCESSION NUMBER: 2004-0580113 PASCAL <<LOGINID::20080122>>

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TITLE (IN ENGLISH): Gangliosides and ganglioside metabolism in normal and tumor cell lines and in embryogenesis

Recent research developments in molecular & cellular
biochemistry. Vol. 1 (2003)

AUTHOR: COLOMBO Irma; RIZZO Angela Maria; SOTTOCORNOLA Elena;
BERRA Bruno
PANDALAI S. G. (ed.)

CORPORATE SOURCE: Institute of General Physiology and Biological
Chemistry, University of Milan, Via D. Trentacoste 2,
20134 Milan, Italy

SOURCE: Recent research developments in molecular & cellular
biochemistry, (2003), 203-227, 158 refs.
ISBN: 81-271-0035-8

DOCUMENT TYPE: Journal

BIBLIOGRAPHIC LEVEL: Analytic

COUNTRY: India

LANGUAGE: English

AVAILABILITY: INIST-L 29475, 354000124340990140

AN 2004-0580113 PASCAL <<LOGINID::20080122>>

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AB Glycosphingolipids (GSLs) are ubiquitous components of the plasma membrane that form complex patterns on all eukaryotic cells. They are anchored into the outer leaflet of the cell membrane by a hydrophobic ceramide moiety, that is linked to an extracellular-oriented hydrophilic ***glycan*** chain. Variations in the type, number, charge and linkage of sugar residues in the ***oligosaccharide*** chain give rise to a wide range of naturally occurring GSLs. Few enzymes generate the molecular diversity of GSLs: de novo biosynthesis of GSLs starts with the formation of ceramide at the membranes of the endoplasmic reticulum and subsequent glycosyltransferases, located in the Golgi complex, add step by step single saccharide residues to the ceramide backbone. Apart from the species-dependence, these molecules form cell specific and developmentally regulated patterns on cell surface that characteristically change with cell growth, ontogenesis, viral ***transformation***, and oncogenesis. The expression of cell-and tissue-specific GSLs and of stable lipid patterns indicates a tight regulation of their biosynthesis, degradation and intracellular transport, but it is not still clearly defined how these processes are controlled. GSLs interact at the cell surface with external ligands/agents/cells eliciting a series of molecular events that allow to control cell proliferation/arrest of proliferation, cell differentiation/apoptosis, embryogenesis, ageing, and oncogenesis. Indeed, they are, by themselves and as components of lipid microdomains, involved in cell-type specific adhesion/recognition phenomena and in initiation/modulation of signaling transduction events. A clear knowledge of the molecular mechanisms by which they may switch on/off specific signals within the cell is still lacking. We report here our recent findings that contribute to define, in the complexity of GSL biology, the regulatory mechanisms of some enzymes involved in the biosynthetic pathway of sialic acid-containing GSLs (gangliosides) and the role of these bioactive molecules in cellular events, such as tumor cell migration and invasiveness, and in the modulation and regulation of expression and activation levels of membrane tyrosine-kinase receptors. These studies have been carried out using various in vitro experimental models, mainly normal and tumor rodent cell lines. Furthermore, in the present review, we also report our results concerning the GSL expression and the ***glycosyltransferase*** activities in two typical models to investigate the biochemical basis of development and embryogenesis: *Xenopus laevis* and chick embryos at different stages of development and treated with various drugs.

L8 ANSWER 9 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2002:206768 USPATFULL <<LOGINID::20080122>>

TITLE: Murine alpha (1,3) fucosyltransferase Fuc-TVII, DNA
encoding the same, method for preparing the same,
antibodies recognizing the same, Immunoassays for
detecting the same, plasmids containing such DNA, and
cells containing such a plasmid

INVENTOR(S): Natsuka, Shunji, Ann Arbor, MI, UNITED STATES
Gersten, Kevin M., Seattle, WA, UNITED STATES
Lowe, John B., Ann Arbor, MI, UNITED STATES

PATENT ASSIGNEE(S): The Regents for the University of Michigan, Ann Arbor,

MI, UNITED STATES, 48109 (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2002111469 A1 20020815

US 6693183 B2 20040217

APPLICATION INFO.: US 2001-784077 A1 20010216 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-613098, filed on 8 Mar 1996, ABANDONED

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC, FOURTH FLOOR, 1755 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA, 22202

NUMBER OF CLAIMS: 16

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Page(s)

LINE COUNT: 2000

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A gene which encodes a murine leukocyte .alpha.(1,3)fucosyltransferase capable of synthesizing the sialyl Lewis x determinant has been cloned.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 10 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2002:191623 USPATFULL <<LOGINID::20080122>>

TITLE: Methods and products for the synthesis of oligosaccharide structures on glycoproteins, glycolipids, or as free molecules, and for the isolation of cloned genetic sequences that determine these structures

INVENTOR(S): Lowe, John B., Ann Arbor, MI, UNITED STATES

PATENT ASSIGNEE(S): The Regents of the University of Michigan, Ann Arbor, MI, UNITED STATES, 48109-1248

NUMBER KIND DATE

PATENT INFORMATION: US 2002102688 A1 20020801

APPLICATION INFO.: US 2001-863475 A1 20010524 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-823489, filed on 25 Mar 1997, ABANDONED Division of Ser. No. US 1996-696731, filed on 14 Aug 1996, PATENTED Division of Ser. No. US 1995-393246, filed on 23 Feb 1995, PATENTED Continuation of Ser. No. US 1994-220433, filed on 30 Mar 1994, ABANDONED Division of Ser. No. US 1992-914281, filed on 20 Jul 1992, PATENTED Continuation-in-part of Ser. No. US 1991-715900, filed on 19 Jun 1991, ABANDONED Continuation-in-part of Ser. No. US 1990-627621, filed on 12 Dec 1990, ABANDONED Continuation-in-part of Ser. No. US 1990-479858, filed on 14 Feb 1990, ABANDONED

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC, FOURTH FLOOR, 1755 JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA, 22202

NUMBER OF CLAIMS: 8

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 44 Drawing Page(s)

LINE COUNT: 6049

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for isolating a gene, comprising:

(i) isolating a cell possessing a post-translational characteristic of interest, said post-translational characteristic being the presence of a membrane-bound oligosaccharide or polysaccharide of interest on the surface of said cell, the presence of a soluble oligosaccharide or polysaccharide of interest in an extract of said cell, or the presence of a particularly glycosyltransferase activity in an extract of said cell;

(ii) creating a genetic library of either cDNA or genomic DNA from the genetic material of said isolated cell;

(iii) transforming host cells with said genetic library; and

(iv) screening said transformed host cells for a host cell containing said post-translational characteristic, thereby obtaining a cell containing said gene, is disclosed. The method can be used to obtain genes encoding glycosyltransferases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 11 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2002:88466 USPATFULL <<LOGINID::20080122>>

TITLE: Control of immune responses by modulating activity of glycosyltransferases

INVENTOR(S): Marth, Jamey D., San Diego, CA, United States

Paulson, James C., Del Mar, CA, United States

PATENT ASSIGNEE(S): Abaron Biosciences, Inc., Del Mar, CA, United States
(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6376475 B1 20020423

APPLICATION INFO.: US 1998-87117 19980529 (9)

NUMBER DATE

PRIORITY INFORMATION: US 1997-48303P 19970530 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Prouty, Rebecca E.

ASSISTANT EXAMINER: Steadman, David J.

LEGAL REPRESENTATIVE: Townsend & Townsend & Crew LLP

NUMBER OF CLAIMS: 19

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)

LINE COUNT: 1986

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides methods for inhibiting immune responses by inhibiting the biosynthesis of the sialyl galactosides that are involved in immune responses. In particular, B lymphocyte-mediated immune responses are mediated by interfering with synthesis of .alpha.2,6 sialylgalactosides, while T lymphocyte-mediated immune responses are inhibited by blocking synthesis of .alpha.2,3 sialylgalactosides. The inhibition is accomplished by, for example, inhibiting the activity of a glycosyltransferase involved in synthesis of the respective sialyl galactoside.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 12 OF 18 WPIDS COPYRIGHT 2008 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-154653 [20] WPIDS

CROSS REFERENCE: 2003-607974; 2004-635587; 2004-642511; 2004-642512;
2004-652965; 2005-649600; 2005-714625; 2006-117604;
2006-145914; 2006-152950; 2006-154044; 2006-154403;
2006-155709; 2006-327511; 2006-470082; 2006-472750;
2007-016216; 2007-173191

DOC. NO. CPI: C2002-048336 [20]

TITLE: Producing modified glycoproteins for therapeutic use, by providing host not expressing enzymes involved in high mannose structure production, and introducing enzymes for carbohydrate structure production into host

DERWENT CLASS: B04; D16

INVENTOR: BOBROWICZ P; CHOI B; DAVIDSON R C; GERNGROSS T U;

HAMILTON S R; NETT J H; WILDT S; GERNGROSS U

PATENT ASSIGNEE: (BOBR-I) BOBROWICZ P; (CHOI-I) CHOI B; (DAVI-I) DAVIDSON R C; (GERN-I) GERNGROSS T U; (GLYC-N) GLYCOFI INC;
(HAMI-I) HAMILTON S R; (NETT-I) NETT J H; (WILD-I) WILDT

S
COUNTRY COUNT: 93

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2002000879	A2	20020103	(200220)*	EN	51[1]	
AU 2001076842	A	20020108	(200235)	EN		
US 20020137134	A1	20020926	(200265)	EN		
EP 1297172	A2	20030402	(200325)	EN		
KR 2003031503	A	20030421	(200353)	KO		
JP 2004501642	W	20040122	(200411)	JA	90	
US 20040018590	A1	20040129	(200413)	EN		
NZ 523476	A	20040430	(200431)	EN		
AU 2001276842	A2	20020108	(200433)	EN		
EP 1522590	A1	20050413	(200525)	EN		
MX 2003000105	A1	20041101	(200558)	ES		
EP 1297172	B1	20051109	(200574)	EN		
DE 60114830	E	20051215	(200582)	DE		
US 7029872	B2	20060418	(200627)	EN		
ES 2252261	T3	20060516	(200634)	ES		
US 20060148035	A1	20060706	(200645)	EN		
DE 60114830	T2	20060803	(200651)	DE		
US 20060177898	A1	20060810	(200654)	EN		
US 20070105127	A1	20070510	(200732)	EN		
US 20070178551	A1	20070802	(200753)	EN		
AU 2001276842	B2	20070426	(200763)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002000879	A2	WO 2001-US20553	20010627
US 20020137134	A1 Provisional	US 2000-214358P	20000628
US 20040018590	A1 Provisional	US 2000-214358P	20000628
US 7029872	B2 Provisional	US 2000-214358P	20000628
US 20060148035	A1 Provisional	US 2000-214358P	20000628
US 20060177898	A1 Provisional	US 2000-214358P	20000628
US 20070105127	A1 Provisional	US 2000-214358P	20000628
US 20070178551	A1 Provisional	US 2000-214358P	20000628
US 20020137134	A1 Provisional	US 2000-215638P	20000630
US 20040018590	A1 Provisional	US 2000-215638P	20000630
US 7029872	B2 Provisional	US 2000-215638P	20000630
US 20060148035	A1 Provisional	US 2000-215638P	20000630
US 20060177898	A1 Provisional	US 2000-215638P	20000630
US 20070105127	A1 Provisional	US 2000-215638P	20000630
US 20070178551	A1 Provisional	US 2000-215638P	20000630
US 20020137134	A1 Provisional	US 2001-279997P	20010330
US 20040018590	A1 Provisional	US 2001-279997P	20010330
US 7029872	B2 Provisional	US 2001-279997P	20010330
US 20060148035	A1 Provisional	US 2001-279997P	20010330
US 20060177898	A1 Provisional	US 2001-279997P	20010330
US 20070105127	A1 Provisional	US 2001-279997P	20010330
US 20070178551	A1 Provisional	US 2001-279997P	20010330
AU 2001076842	A	AU 2001-76842	20010627
AU 2001276842	A2	AU 2001-76842	20010627
DE 60114830	E	DE 2001-614830	20010627
DE 60114830	T2	DE 2001-614830	20010627
EP 1297172	A2	EP 2001-954606	20010627
EP 1522590	A1 Div Ex	EP 2001-954606	20010627
EP 1297172	B1	EP 2001-954606	20010627
DE 60114830	E	EP 2001-954606	20010627
ES 2252261	T3	EP 2001-954606	20010627
DE 60114830	T2	EP 2001-954606	20010627
NZ 523476	A	NZ 2001-523476	20010627
US 20020137134	A1	US 2001-892591	20010627
US 20040018590	A1 CIP of	US 2001-892591	20010627
US 7029872	B2	US 2001-892591	20010627
US 20060148035	A1 Div Ex	US 2001-892591	20010627

US 20060177898 A1 Div Ex	US 2001-892591 20010627
US 20070105127 A1 Div Ex	US 2001-892591 20010627
US 20070178551 A1 Cont of	US 2001-892591 20010627
EP 1297172 A2	WO 2001-US20553 20010627
JP 2004501642 W	WO 2001-US20553 20010627
NZ 523476 A	WO 2001-US20553 20010627
MX 2003000105 A1	WO 2001-US20553 20010627
EP 1297172 B1	WO 2001-US20553 20010627
DE 60114830 E	WO 2001-US20553 20010627
DE 60114830 T2	WO 2001-US20553 20010627
JP 2004501642 W	JP 2002-506194 20010627
KR 2003031503 A	KR 2002-717911 20021228
MX 2003000105 A1	MX 2003-105 20030107
US 20040018590 A1	US 2003-371877 20030220
EP 1522590 A1	EP 2004-25648 20010627
EP 1297172 B1 Related to	EP 2004-25648 20041028
US 20060177898 A1	US 2005-249061 20051011
US 20070178551 A1	US 2005-265444 20051101
US 20070105127 A1	US 2005-271217 20051110
US 20060148035 A1	US 2005-271235 20051110
AU 2001276842 B2	AU 2001-276842 20010627

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1522590 A1 Div ex	EP 1297172 A	
DE 60114830 E Based on	EP 1297172 A	
ES 2252261 T3 Based on	EP 1297172 A	
DE 60114830 T2 Based on	EP 1297172 A	
EP 1297172 B1 Related to	EP 1522590 A	
US 20060148035 A1 Div ex	US 7029872 B	
US 20060177898 A1 Div ex	US 7029872 B	
US 20070105127 A1 Div ex	US 7029872 B	
US 20070178551 A1 Cont of	US 7029872 B	
AU 2001076842 A Based on	WO 2002000879 A	
EP 1297172 A2 Based on	WO 2002000879 A	
JP 2004501642 W Based on	WO 2002000879 A	
NZ 523476 A Based on	WO 2002000879 A	
AU 2001276842 A2 Based on	WO 2002000879 A	
MX 2003000105 A1 Based on	WO 2002000879 A	
EP 1297172 B1 Based on	WO 2002000879 A	
DE 60114830 E Based on	WO 2002000879 A	
DE 60114830 T2 Based on	WO 2002000879 A	
AU 2001276842 B2 Based on	WO 2002000879 A	

PRIORITY APPLN. INFO: US 2001-279997P 20010330

US 2000-214358P	20000628
US 2000-215638P	20000630
US 2001-892591	20010627
US 2003-371877	20030220
US 2005-249061	20051011
US 2005-271217	20051110
US 2005-271235	20051110
US 2005-265444	20051101

AN 2002-154653 [20] WPIDS

CR 2003-607974; 2004-635587; 2004-642511; 2004-642512; 2004-652965; 2005-649600; 2005-714625; 2006-117604; 2006-145914; 2006-152950; 2006-154044; 2006-154403; 2006-155709; 2006-327511; 2006-470082; 2006-472750; 2007-016216; 2007-173191

AB WO 2002000879 A2 UPAB: 20060202

NOVELTY - Producing (M) glycoproteins having carbohydrate structures similar to those produced by human cells in a lower eukaryote, comprising providing a unicellular/multicellular fungal host, which does not express enzymes involved in production of high mannose structures, and introducing into the host enzymes for production of carbohydrate structure, is new.

DETAILED DESCRIPTION - Producing (M) glycoproteins having carbohydrate structures similar to those produced by human cells in a lower eukaryote, comprising providing a unicellular/multicellular fungal host, which does not express enzymes involved in production of high

mannose structures, and introducing into the host enzymes for production of carbohydrate structure, such as Man5GlcNAc2, Man8GlcNAc2 or Man9GlcNAc2, is new. The enzymes are selected to have optimal activity at the pH of the location in the host where the carbohydrate structure is produced or which are targeted to a subcellular location in the host where enzyme will have optimal activity to produce the structure.

INDEPENDENT CLAIMS are also included for the following:

(1) a host (I) which does not express enzymes involved in production of high mannose structures;

(2) a glycoprotein (II) produced by (M); and

(3) a library (III) comprising at least two genes encoding exogenous glycosylation enzyme.

ACTIVITY - None given.

MECHANISM OF ACTION - None given.

USE - (M) is useful for producing glycoproteins having carbohydrate structures similar to those produced by human cells in a lower eukaryote (claimed). (II) is useful as human or animal therapeutic agent.

L8 ANSWER 13 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2001:121300 USPATFULL <<LOGINID::20080122>>

TITLE: Methods and products for the synthesis of oligosaccharide structures on glycoproteins, glycolipids, or as free molecules, and for the isolation of cloned genetic sequences that determine these structures

INVENTOR(S): Lowe, John B., Ann Arbor, MI, United States

PATENT ASSIGNEE(S): The Regents of the University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 6268193 B1 20010731

APPLICATION INFO.: US 1998-42531 19980317 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1996-696731, filed on 14 Aug 1996, now patented, Pat. No. US 5955347 Division of Ser. No. US 1995-393246, filed on 23 Feb 1995, now patented, Pat. No. US 5595900 Continuation of Ser. No. US 1994-220433, filed on 30 Mar 1994, now abandoned Division of Ser. No. US 1992-914281, filed on 20 Jul 1992, now patented, Pat. No. US 5324663 Continuation-in-part of Ser. No. US 1991-715900, filed on 19 Jun 1991, now abandoned Continuation-in-part of Ser. No. US 1990-627621, filed on 12 Dec 1990, now abandoned Continuation-in-part of Ser. No. US 1990-479858, filed on 14 Feb 1990, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Prouty, Rebecca E.

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS: 10

EXEMPLARY CLAIM: 1,2

NUMBER OF DRAWINGS: 43 Drawing Figure(s); 43 Drawing Page(s)

LINE COUNT: 5302

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for isolating a gene, comprising:

(i) isolating a cell possessing a post-translational characteristic of interest, said post-translational characteristic being the presence of a membrane-bound oligosaccharide or polysaccharide of interest on the surface of said cell, the presence of a soluble oligosaccharide or polysaccharide of interest in an extract of said cell, or the presence of a particularly glycosyltransferase activity in an extract of said cell;

(ii) creating a genetic library of either cDNA or genomic DNA from the genetic material of said isolated cell;

(iii) transforming host cells with said genetic library; and

(iv) screening said transformed host cells for a host cell containing

said post-translational characteristic, thereby obtaining a cell containing said gene, is disclosed. The method can be used to obtain genes encoding glycosyltransferases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 14 OF 18 USPATFULL on STN

ACCESSION NUMBER: 1999:113635 USPATFULL <<LOGINID::20080122>>

TITLE: Methods and products for the synthesis of oligosaccharide structures on glycoproteins, glycolipids, or as free molecules, and for the isolation of cloned genetic sequences that determine these structures

INVENTOR(S): Lowe, John B., Ann Arbor, MI, United States

PATENT ASSIGNEE(S): The Regents of the University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5955347 19990921

APPLICATION INFO.: US 1996-696731 19960814 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-393246, filed on 23 Feb 1995, now patented, Pat. No. US 5595900 which is a continuation of Ser. No. US 1994-220433, filed on 30 Mar 1994, now abandoned which is a division of Ser. No. US 1992-914281, filed on 20 Jul 1992, now patented, Pat. No. US 5324663 which is a continuation-in-part of Ser. No. US 1991-715900, filed on 19 Jun 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-627621, filed on 12 Dec 1990, now abandoned which is a continuation-in-part of Ser. No. US 1990-479858, filed on 14 Feb 1990, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Prouty, Rebecca E.

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS: 18

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 42 Drawing Figure(s); 43 Drawing Page(s)

LINE COUNT: 6161

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for isolating a gene, comprising:

(i) isolating a cell possessing a post-translational characteristic of interest, said post-translational characteristic being the presence of a membrane-bound oligosaccharide or polysaccharide of interest on the surface of said cell, the presence of a soluble oligosaccharide or polysaccharide of interest in an extract of said cell, or the presence of a particularly glycosyltransferase activity in an extract of said cell;

(ii) creating a genetic library of either cDNA or genomic DNA from the genetic material of said isolated cell;

(iii) transforming host cells with said genetic library; and

(iv) screening said transformed host cells for a host cell containing said post-translational characteristic, thereby obtaining a cell containing said gene, is disclosed. The method can be used to obtain genes encoding glycosyltransferases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 15 OF 18 BIOTECHNO COPYRIGHT 2008 Elsevier Science B.V. on STN
DUPLICATE

ACCESSION NUMBER: 1999:29190398 BIOTECHNO <<LOGINID::20080122>>

TITLE: Stable expression of human .beta.1,4-galactosyltransferase in plant cells modifies N-linked glycosylation patterns

AUTHOR: Palacpac N.Q.; Yoshida S.; Sakai H.; Kimura Y.;

Fujiyama K.; Yoshida T.; Seki T.
CORPORATE SOURCE: K. Fujiyama, International Ctr. for Biotechnology,
Osaka University, Yamada-oka 2-1, Suita-shi, Osaka
565, Japan.
E-mail: fujiyama@icb.osaka-u.ac.jp
SOURCE: Proceedings of the National Academy of Sciences of the
United States of America, (13 APR 1999), 96/8
(4692-4697), 40 reference(s)
CODEN: PNASA6 ISSN: 0027-8424

DOCUMENT TYPE: Journal; Article

COUNTRY: United States

LANGUAGE: English

SUMMARY LANGUAGE: English

AN 1999:29190398 BIOTECHNO <<LOGINID::20080122>>

AB .beta.1,4-Galactosyltransferase (UDP galactose: .beta.-N-acetylglucosaminide: .beta.1,4-galactosyltransferase; EC 2.4.1.22) catalyzes the transfer of galactose from UDP-Gal to N-acetylglucosamine in the penultimate stages of the terminal glycosylation of N-linked complex oligosaccharides in mammalian cells. Tobacco BY2 cells lack this Golgi enzyme. To determine to what extent the production of a mammalian ***glycosyltransferase*** can alter the glycosylation pathway of plant cells, tobacco BY2 suspension-cultured cells were stably ***transformed*** with the full-length human galactosyltransferase gene placed under the control of the cauliflower mosaic virus 35S promoter. The expression was confirmed by assaying enzymatic activity as well as by Southern and Western blotting. The ***transformant*** with the highest level of enzymatic activity has ***glycans*** with galactose residues at the terminal nonreducing ends, indicating the successful modification of the plant cell N- glycosylation pathway. Analysis of the ***oligosaccharide*** structures shows that the galactosylated N- ***glycans*** account for 47.3% of the total sugar chains. In addition, the absence of the dominant xylosidated- and fucosylated-type sugar chains confirms that the ***transformed*** cells can be used to produce glycoproteins without the highly immunogenic ***glycans*** typically found in plants. These results demonstrate the synthesis in plants of N-linked ***glycans*** with modified and defined sugar chain structures similar to mammalian glycoproteins.

L8 ANSWER 16 OF 18 USPATFULL on STN

ACCESSION NUMBER: 1998:72452 USPATFULL <<LOGINID::20080122>>

TITLE: Methods and products for the synthesis of
oligosaccharide structures on glycoproteins,
glycolipids, or as free molecules, and for the
isolation of cloned genetic sequences that determine
these structures

INVENTOR(S): Lowe, John B., Ann Arbor, MI, United States

Legault, Daniel J., Ann Arbor, MI, United States

PATENT ASSIGNEE(S): The Regents of the University of Michigan, Ann Arbor,
MI, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5770420 19980623

APPLICATION INFO.: US 1995-525058 19950908 (8)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Wax, Robert A.

ASSISTANT EXAMINER: Hobbs, Lisa J.

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS: 26

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 38 Drawing Figure(s); 38 Drawing Page(s)

LINE COUNT: 7237

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for isolating a gene, comprising:

(i) isolating a cell possessing a post-translational characteristic of interest, said post-translational characteristic being the presence of a membrane-bound oligosaccharide or polysaccharide of interest on the surface of said cell, the presence of a soluble oligosaccharide or

polysaccharide of interest in an extract of said cell, or the presence of a particularly glycosyltransferase activity in an extract of said cell;

(ii) creating a genetic library of either cDNA or genomic DNA from the genetic material of said isolated cell;

(iii) transforming host cells with said genetic library; and

(iv) screening said transformed host cells for a host cell containing said post-translational characteristic, thereby obtaining a cell containing said gene, is disclosed. The method can be used to obtain genes encoding glycosyltransferases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 17 OF 18 USPATFULL on STN

ACCESSION NUMBER: 97:5881 USPATFULL <<LOGINID::20080122>>

TITLE: Methods and products for the synthesis of oligosaccharide structures on glycoproteins, glycolipids, or as free molecules, and for the isolation of cloned genetic sequences that determine these structures

INVENTOR(S): Lowe, John B., Ann Arbor, MI, United States

PATENT ASSIGNEE(S): The Regents of the University of Michigan, Ann Arbor, MI, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5595900 19970121

APPLICATION INFO.: US 1995-393246 19950223 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1994-220433, filed on 30 Mar 1994, now abandoned which is a division of Ser. No. US 1992-914281, filed on 20 Jul 1992, now patented, Pat. No. US 5324663 which is a continuation-in-part of Ser. No. US 1991-715900, filed on 19 Jun 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-627621, filed on 12 Dec 1990, now abandoned which is a continuation-in-part of Ser. No. US 1990-479858, filed on 14 Feb 1990, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Wax, Robert A.

ASSISTANT EXAMINER: Prouty, Rebecca

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS: 2

EXEMPLARY CLAIM: 2

NUMBER OF DRAWINGS: 43 Drawing Figure(s); 43 Drawing Page(s)

LINE COUNT: 5781

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for isolating a gene, comprising:

(i) isolating a cell possessing a post-translational characteristic of interest, said post-translational characteristic being the presence of a membrane-bound oligosaccharide or polysaccharide of interest on the surface of said cell, the presence of a soluble oligosaccharide or polysaccharide of interest in an extract of said cell, or the presence of a particularly glycosyltransferase activity in an extract of said cell;

(ii) creating a genetic library of either cDNA or genomic DNA from the genetic material of said isolated cell;

(iii) transforming host cells with said genetic library; and

(iv) screening said transformed host cells for a host cell containing said post-translational characteristic, thereby obtaining a cell containing said gene, is disclosed. The method can be used to obtain genes encoding glycosyltransferases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 18 OF 18 USPATFULL on STN

ACCESSION NUMBER: 94:55482 USPATFULL <<LOGINID::20080122>>

TITLE: Methods and products for the synthesis of
oligosaccharide structures on glycoproteins,
glycolipids, or as free molecules, and for the
isolation of cloned genetic sequences that determine
these structures

INVENTOR(S): Lowe, John B., Ann Arbor, MI, United States

PATENT ASSIGNEE(S): The Regents of the University of Michigan, Ann Arbor,
MI, United States (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 5324663 19940628

APPLICATION INFO.: US 1992-914281 19920720 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1991-715900, filed
on 19 Jun 1991, now abandoned which is a
continuation-in-part of Ser. No. US 1990-627621, filed
on 12 Dec 1990, now abandoned which is a
continuation-in-part of Ser. No. US 1990-479858, filed
on 14 Feb 1990, now abandoned

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted

PRIMARY EXAMINER: Wax, Robert A.

ASSISTANT EXAMINER: Prouty, Rebecca

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt

NUMBER OF CLAIMS: 11

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 43 Drawing Figure(s); 43 Drawing Page(s)

LINE COUNT: 5605

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for isolating a gene, comprising:

(i) isolating a cell possessing a post-translational characteristic of
interest, said post-translational characteristic being the presence of a
membrane-bound oligosaccharide or polysaccharide of interest on the
surface of said cell, the presence of a soluble oligosaccharide or
polysaccharide of interest in an extract of said cell, or the presence
of a particularly glycosyltransferase activity in an extract of said
cell;

(ii) creating a genetic library of either cDNA or genomic DNA from the
genetic material of said isolated cell;

(iii) transforming host cells with said genetic library; and

(iv) screening said transformed host cells for a host cell containing
said post-translational characteristic, thereby obtaining a cell
containing said gene, is disclosed. The method can be used to obtain
genes encoding glycosyltransferases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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L1 QUE (GLYCOSYLTRANSFERASE OR (OLIGOSACCHAR? (W) TRANSFERASE))

FILE 'EMBASE, CAPLUS, BIOSIS, SCISEARCH, BIOTECHNO, USPATFULL, MEDLINE,
ESBIODBASE, PASCAL, TOXCENTER, LIFESCI, WPIDS' ENTERED AT 10:41:49 ON 22
JAN 2008

L2 27931 S L1

L3 881 S (ORGANISM OR PROKARYOT? OR TRANSFORM?(S) L2

L4 92 S OLIGOSACCHARIDE (S) L3

L5 0 S (GLYCANS OR N-GLYCANS) AND L4

L6 0 S GLYCANE? AND L4

L7 20 S GLYCAN? AND L4
L8 18 DUP REM L7 (2 DUPLICATES REMOVED)

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